

1D  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: SWL-TULSA

Contract: 68-D5-0021

EZD14 SS14

Lab Code: SWOK

Case No.: 24752

SAS No.:

SDG No.: EZD01

Matrix: (soil/water) SOIL

Lab Sample ID: 25973.14

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: \_\_\_\_\_

% Moisture: 38 decanted: (Y/N) N

Date Received: 06/12/96

Extraction: (SepF/Cont/Sonc) SONC

Date Extracted: 06/20/96

Concentrated Extract Volume: 5000(uL)

Date Analyzed: 07/17/96

Injection Volume: 1.0(uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y

pH: 7.7

Sulfur Cleanup: (Y/N) N

CAS NO. COMPOUND CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/KG Q

319-84-6-----	alpha-BHC	2.7	U
319-85-7-----	beta-BHC	2.7	U
319-86-8-----	delta-BHC	2.7	U
58-89-9-----	gamma-BHC (Lindane)	2.7	U
76-44-8-----	Heptachlor	2.7	U
309-00-2-----	Aldrin	2.7	U
1024-57-3-----	Heptachlor epoxide	2.7	U
959-98-8-----	Endosulfan I	2.7	U
60-57-1-----	Dieldrin	5.3	U
72-55-9-----	4,4'-DDE	8.7	
72-20-8-----	Endrin	5.3	U
33213-65-9-----	Endosulfan II	5.3	U
72-54-8-----	4,4'-DDD	5.3	U
1031-07-8-----	Endosulfan sulfate	5.3	U
50-29-3-----	4,4'-DDT	5.3	U
72-43-5-----	Methoxychlor	27	U
53494-70-5-----	Endrin ketone	5.3	U
7421-93-4-----	Endrin aldehyde	5.3	U
5103-71-9-----	alpha-Chlordane	2.7	U
5103-74-2-----	gamma-Chlordane	2.7	U
8001-35-2-----	Toxaphene	270	U
12674-11-2-----	Aroclor-1016	53	U
11104-28-2-----	Aroclor-1221	110	U
11141-16-5-----	Aroclor-1232	53	U
53469-21-9-----	Aroclor-1242	53	U
12672-29-6-----	Aroclor-1248	53	U
11097-69-1-----	Aroclor-1254	42	J
11096-82-5-----	Aroclor-1260	53	U

1D  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EZD15 SS15

Lab Name: SWL-TULSA

Contract: 68-D5-0021

Lab Code: SWOK

Case No.: 24752

SAS No.:

SDG No.: EZD01

Matrix: (soil/water) SOIL

Lab Sample ID: 25973.15

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: \_\_\_\_\_

% Moisture: 43 decanted: (Y/N) N

Date Received: 06/12/96

Extraction: (SepF/Cont/Sonc) SONC

Date Extracted: 06/20/96

Concentrated Extract Volume: 5000(uL)

Date Analyzed: 07/16/96

Injection Volume: 1.0(uL)

Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH: 8.1

Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
---------	----------	---	---

319-84-6-----	alpha-BHC	6.0	U
319-85-7-----	beta-BHC	6.0	U
319-86-8-----	delta-BHC	6.0	U
58-89-9-----	gamma-BHC (Lindane)	6.0	U
76-44-8-----	Heptachlor	6.0	U
309-00-2-----	Aldrin	6.0	U
1024-57-3-----	Heptachlor epoxide	6.0	U
959-98-8-----	Endosulfan I	6.0	U
60-57-1-----	Dieldrin	9.9	PJ
72-55-9-----	4,4'-DDE	72	
72-20-8-----	Endrin	24	P
33213-65-9-----	Endosulfan II	16	P
72-54-8-----	4,4'-DDD	12	U
1031-07-8-----	Endosulfan sulfate	8.7	PJ
50-29-3-----	4,4'-DDT	21	P
72-43-5-----	Methoxychlor	60	U
53494-70-5-----	Endrin ketone	12	U
7421-93-4-----	Endrin aldehyde	12	U
5103-71-9-----	alpha-Chlordane	14	P
5103-74-2-----	gamma-Chlordane	6.0	U
8001-35-2-----	Toxaphene	600	U
12674-11-2-----	Aroclor-1016	120	U
11104-28-2-----	Aroclor-1221	240	U
11141-16-5-----	Aroclor-1232	120	U
53469-21-9-----	Aroclor-1242	120	U
12672-29-6-----	Aroclor-1248	120	U
11097-69-1-----	Aroclor-1254	590	P
11096-82-5-----	Aroclor-1260	120	U

1D  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: SWL-TULSA

Contract: 68-D5-0021

EZD16 *SS16*

Lab Code: SWOK

Case No.: 24752

SAS No.:

SDG No.: EZD01

Matrix: (soil/water) SOIL

Lab Sample ID: 25973.16

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: \_\_\_\_\_

% Moisture: 36 decanted: (Y/N) N

Date Received: 06/12/96

Extraction: (SepF/Cont/Sonc) SONC

Date Extracted: 06/20/96

Concentrated Extract Volume: 5000(uL)

Date Analyzed: 07/19/96

Injection Volume: 1.0(uL)

Dilution Factor: 5.0

GPC Cleanup: (Y/N) Y

pH: 7.8

Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
---------	----------	---	---

319-84-6-----	alpha-BHC	13	U
319-85-7-----	beta-BHC	13	U
319-86-8-----	delta-BHC	13	U
58-89-9-----	gamma-BHC (Lindane)	13	U
76-44-8-----	Heptachlor	13	U
309-00-2-----	Aldrin	36	
1024-57-3-----	Heptachlor epoxide	13	U
959-98-8-----	Endosulfan I	13	U
60-57-1-----	Dieldrin	26	U
72-55-9-----	4,4'-DDE	98	P
72-20-8-----	Endrin	54	P
33213-65-9-----	Endosulfan II	60	
72-54-8-----	4,4'-DDD	16	PJ
1031-07-8-----	Endosulfan sulfate	160	P
50-29-3-----	4,4'-DDT	26	U
72-43-5-----	Methoxychlor	130	U
53494-70-5-----	Endrin ketone	26	U
7421-93-4-----	Endrin aldehyde	26	U
5103-71-9-----	alpha-Chlordane	13	U
5103-74-2-----	gamma-Chlordane	52	
8001-35-2-----	Toxaphene	1300	U
12674-11-2-----	Aroclor-1016	260	U
11104-28-2-----	Aroclor-1221	520	U
11141-16-5-----	Aroclor-1232	260	U
53469-21-9-----	Aroclor-1242	260	U
12672-29-6-----	Aroclor-1248	260	U
11097-69-1-----	Aroclor-1254	560	P
11096-82-5-----	Aroclor-1260	260	U

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1D  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: SWL-TULSA

Contract: 68-D5-0021

EZD17 SS17

Lab Code: SWOK

Case No.: 24752

SAS No.:

SDG No.: EZD01

Matrix: (soil/water) SOIL

Lab Sample ID: 25973.17

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: \_\_\_\_\_

% Moisture: 37 decanted: (Y/N) N

Date Received: 06/12/96

Extraction: (SepF/Cont/Sonc) SONC

Date Extracted: 06/20/96

Concentrated Extract Volume: 5000(uL)

Date Analyzed: 07/16/96

Injection Volume: 1.0(uL)

Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH: 7.9

Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
---------	----------	---	---

319-84-6-----	alpha-BHC	5.4	U
319-85-7-----	beta-BHC	5.4	U
319-86-8-----	delta-BHC	5.4	U
58-89-9-----	gamma-BHC (Lindane)	5.4	U
76-44-8-----	Heptachlor	5.4	U
309-00-2-----	Aldrin	5.4	U
1024-57-3-----	Heptachlor epoxide	5.4	U
959-98-8-----	Endosulfan I	5.4	U
60-57-1-----	Dieldrin	10	U
72-55-9-----	4,4'-DDE	140	P
72-20-8-----	Endrin	19	P
33213-65-9-----	Endosulfan II	120	P
72-54-8-----	4,4'-DDD	40	P
1031-07-8-----	Endosulfan sulfate	10	U
50-29-3-----	4,4'-DDT	10	U
72-43-5-----	Methoxychlor	54	U
53494-70-5-----	Endrin ketone	10	U
7421-93-4-----	Endrin aldehyde	10	U
5103-71-9-----	alpha-Chlordane	38	
5103-74-2-----	gamma-Chlordane	31	P
8001-35-2-----	Toxaphene	540	U
12674-11-2-----	Aroclor-1016	100	U
11104-28-2-----	Aroclor-1221	210	U
11141-16-5-----	Aroclor-1232	100	U
53469-21-9-----	Aroclor-1242	100	U
12672-29-6-----	Aroclor-1248	100	U
11097-69-1-----	Aroclor-1254	960	P
11096-82-5-----	Aroclor-1260	100	U

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1D  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: SWL-TULSA

Contract: 68-D5-0021

EZD18 SS18

Lab Code: SWOK

Case No.: 24752

SAS No.:

SDG No.: EZD01

Matrix: (soil/water) SOIL

Lab Sample ID: 25973.18

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: \_\_\_\_\_

% Moisture: 9 decanted: (Y/N) N

Date Received: 06/12/96

Extraction: (SepF/Cont/Sonc) SONC

Date Extracted: 06/20/96

Concentrated Extract Volume: 5000(uL)

Date Analyzed: 07/16/96

Injection Volume: 1.0(uL)

Dilution Factor: 20.0

GPC Cleanup: (Y/N) Y pH: 7.7

Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
---------	----------	---	---

319-84-6-----	alpha-BHC	37	U
319-85-7-----	beta-BHC	37	U
319-86-8-----	delta-BHC	37	U
58-89-9-----	gamma-BHC (Lindane)	37	U
76-44-8-----	Heptachlor	37	U
309-00-2-----	Aldrin	37	U
1024-57-3-----	Heptachlor epoxide	37	U
959-98-8-----	Endosulfan I	37	U
60-57-1-----	Dieldrin	72	U
72-55-9-----	4,4'-DDE	610	
72-20-8-----	Endrin	21	PJ
33213-65-9-----	Endosulfan II	72	U
72-54-8-----	4,4'-DDD	71	J
1031-07-8-----	Endosulfan sulfate	430	P
50-29-3-----	4,4'-DDT	190	
72-43-5-----	Methoxychlor	370	U
53494-70-5-----	Endrin ketone	72	U
7421-93-4-----	Endrin aldehyde	72	U
5103-71-9-----	alpha-Chlordane	37	U
5103-74-2-----	gamma-Chlordane	37	U
8001-35-2-----	Toxaphene	3700	U
12674-11-2-----	Aroclor-1016	720	U
11104-28-2-----	Aroclor-1221	1500	U
11141-16-5-----	Aroclor-1232	720	U
53469-21-9-----	Aroclor-1242	720	U
12672-29-6-----	Aroclor-1248	720	U
11097-69-1-----	Aroclor-1254	780	P
11096-82-5-----	Aroclor-1260	720	U

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION V

ESD Central Regional Laboratory  
Data Tracking Form for Contract Samples

Data Set No: \_\_\_\_\_ CERCLIS No: MI  
Case No: 2475 Site Name Location: Carter Color Cont  
Contractor or EPA Lab: SWOR Data User: MONR  
No. of Samples: 18 Date Sampled or Data Received: 7-23-96  
Have Chain-of-Custody records been received? Yes ☒ No ☐  
Have traffic reports or packing lists been received? Yes ☒ No ☐  
If no, are traffic report or packing list numbers written on the chain-of-custody record? Yes ☒ No ☐  
If no, which traffic report or packing list numbers are missing?  
\_\_\_\_\_  
\_\_\_\_\_

Are basic data forms in? Yes ☒ No ☐  
No of samples claimed: 18 No. of samples received: 18  
Received by: Lynette Burnett Date: 7-23-96  
Received by LSSS: Lynette Burnett Date: 7-23-96  
Review started: 8/08/96 Reviewer Signature: K. Minchuk  
Total time spent on review: 18 Date review completed: 08-15-96  
Copied by: Lynette Burnett Date: 9-9-96  
Mailed to user by: Lynette Burnett Date: 9-9-96

**DATA USER:**

Please fill in the blanks below and return this form to:  
Sylvia Griffen, Data mgmt. Coordinator, Region V, 5SCRL

Data received by: \_\_\_\_\_ Date: \_\_\_\_\_  
Data review received by: \_\_\_\_\_ Date: \_\_\_\_\_

Inorganic Data Complete	[ ]	Suitable for Intended Purpose	[ ]	✓ if OK
Organic Data Complete	[ ]	Suitable for Intended Purpose	[ ]	✓ if OK
Dioxin Data Complete	[ ]	Suitable for Intended Purpose	[ ]	✓ if OK
SAS Data Complete	[ ]	Suitable for Intended Purpose	[ ]	✓ if OK

**PROBLEMS:** Please indicate reasons why data are not suitable for your uses.  
\_\_\_\_\_  
\_\_\_\_\_

Received by Data Mgmt. Coordinator for Files. Data: \_\_\_\_\_



# Spills Inorganics

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION V

DATE: 08-19-96

SUBJECT: Review of Region V CLP Data  
Received for Review on

July 23, 1996

FROM: Stephen L. Ostrodka, Chief (HSRL-5J)  
Superfund Technical Support Section

L. Finkelberg

TO: Data User: MDNR

We have reviewed the data for the following case:

SITE NAME: Carter Color Coat (MI)

CASE NUMBER: 24752 SDG NUMBER: MEPQ 41

Number and Type of Samples: 18 (soil)

Sample Numbers: MEPQ 41-58

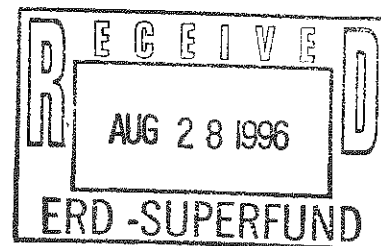
Laboratory: AATS Hrs. for Review: 13 hrs + 1.0

Following are our findings:

All data are usable with the qualifications described in the attached narrative.

L. Finkelberg

08-19-96



cc: Regional TPO  
Brian Freeman  
HSMC-5J



NARRATIVE

SITE : Carter Color Coat  
CONTRACTOR: AATS

CASE: 24752  
SDG : MEPQ41

The laboratory's portion of this case contains eighteen low level soil samples (MEPQ41-MEPQ58) analyzed for total metals and cyanide. Below is a summary of the out of control audits and their possible effects on the data for this case.

**EVIDENTIAL AUDIT:** All raw data, airbill, forms, traffic report/chain of custody sheet, DC-1 form (log-in sheet) and DC-2 form (inventory sheet) are originals and are present in the order indicated on the DC-2 form. All original sample tags are included in the case.

**ICP ANALYSES:** The duplicate audit for Cr (24.6% RPD) was flagged by the laboratory. However, the duplicate difference did not exceed the technical criterion (35% RPD) for soil samples. The matrix spike recovery for Cr (-1148.2%) was not flagged by the laboratory because the sample result was greater than 4X the spike amount added. All Cr results are acceptable.

The duplicate audit for Zn (24.5% RPD) was flagged by the laboratory. However, the duplicate difference did not exceed the technical criterion (35% RPD) for soil samples. The matrix spike recovery for Zn (-773.1%) was not flagged by the laboratory because the sample result was greater than 4X the spike amount added. All Zn results are acceptable.

The duplicate audits for Ba (59.9% RPD) and Cu (35.0% RPD) were out of control. All Ba and Cu results are estimated (J) due to poor precision. The matrix spike recoveries for Ba (-498.5%) and Cu (-1089.3%) were not flagged by the laboratory because the sample results were greater than 4X the spike amount added. The Ba and Cu results are not qualified on this basis but remain qualified as above.

The duplicate audit for Ni (37.5% RPD) was flagged by the laboratory. However, the duplicate difference did not exceed the technical criterion (+/- 2xCRDL) for soil samples. The Ni results are not qualified on this basis. The serial dilution audit for Ni (10.3% D) was out of control and was not flagged by the laboratory. All Ni results are estimated (J) due to interference. The (E) flag was added on Form Is and Form IX for Ni by the reviewer.

Reviewed by: Steffanie N. Tobin (Lockheed/ESAT)  
Date: August 9, 1996

The duplicate audits for Fe (46.5% RPD) was out of control. All Fe results are estimated (J) due to poor precision.

The duplicate audit for Se (49.8% RPD) was not flagged by the laboratory because the duplicate difference did not exceed the technical criterion ( $\pm 2 \times \text{CRDL}$ ) for soil samples. All Se results are acceptable.

The matrix spike recovery for Pb (16867.9%) was not flagged by the laboratory because the sample result were greater than 4X the spike amount added. All Pb results are acceptable.

The matrix spike recovery for Sb (50.0%) was out of control. The ICB was found to contain Sb ( $8.4 \mu\text{g/L}$ ). The Sb results for MEPQ45, MEPQ46, MEPQ48-MEPQ54 are estimated (J) due to low bias and contamination. The Sb results for MEPQ41-MEPQ44, MEPQ47 and MEPQ55-MEPQ58 are estimated (J) due to low bias.

The serial dilution audit for Cd (10.1% D) was out of control and was not flagged by the laboratory. All Cd results are estimated (J) due to interference. The (E) flag was added on Form Is and Form IX for Cd by the reviewer.

**OTHER QUALIFIERS:** The duplicate audit for Hg (21.8% RPD) was flagged by the laboratory. However, the duplicate difference did not exceed the technical criterion (35% RPD) for soil samples. The matrix spike recovery for Hg (-71.9%) was not flagged by the laboratory because the sample result was greater than 4X the spike amount added. All Hg results are acceptable.

The matrix spike recovery for CN (55.0%) was out of control. All CN results are estimated (J) due to low bias.

Reviewed by: Steffanie N. Tobin (Lockheed/ESAT)  
Date: August 9, 1996

**SOUTHWEST LABORATORY OF OKLAHOMA, INC.**

1700 West Albany / Broken Arrow, Oklahoma 74012 / Office (918) 251-2858 / Fax (918) 251-2599

**SDG NARRATIVE**

001

**CONTRACT: 68-D5-0141**

**DATE: 07/16/96**

**CASE: 24752**

**SOW NO.: ILM04.0**

**SDG: MEPQ41**

**EPISODE NO.: 25979**

**INORGANIC METAL FRACTION:**

18 soil samples plus 1 LCS/MS/DUP were submitted for ICP, CN and Hg analysis. The samples' analyses were completed according to SOW ILM04.0.

No major problems occurred during the digestion or analyses of these samples. Post digestion was not performed for CN analysis. The need was noticed after hold time was expired.

**Initial and Continuing Calibration Checks:** No problems.

**Initial and Continuing Calibration Blanks:** The following elements showed low level concentrations below the Contract Required Detection Limit in the Calibration Blanks: Sb, Ca, Fe, Pb, Zn, Al, Mg, Na, & CN. No action required.

**Linearity near the CRDL (CRA & CRI):** No problems.

**Preparation Blanks:** No problems.

**Lab Control Spikes:** No problems.

**Matrix Spike:** The following elements were outside the control limits of 75-125% recovery: Sb & CN. All associated samples were flagged with a "N" on Form I's. No action required.

**Duplicate:** The following elements were outside the control limits of 0-20% RPD: Ba, Cr, Cu, Fe, Hg, Ni, & Zn. All associated samples were flagged with a "\*" on Form I's. No action required.

**Serial Dilution (ICP):** No problems.

Sincerely,



Deborah J. Beree for...

Jason D. Ruckman

Inorganic Program Manager

## U.S. EPA - CLP

## COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

002

Name: AMERICAN ANALYTICAL \_\_\_\_\_ Contract: 68-D5-0141  
Lab Code: AATS \_\_\_\_\_ Case No.: 24752 SAS No.: \_\_\_\_\_ SDG No.: MEPQ41  
SOW No.: ILM04.0

EPA Sample No.	Lab Sample ID
MEPQ41	25979.01
MEPQ41D	25979.01D
MEPQ41S	25979.01S
MEPQ42	25979.02
MEPQ43	25979.03
MEPQ44	25979.04
MEPQ45	25979.05
MEPQ46	25979.06
MEPQ47	25979.07
MEPQ48	25979.08
MEPQ49	25979.09
MEPQ50	25979.10
MEPQ51	25979.11
MEPQ52	25979.12
MEPQ53	25979.13
MEPQ54	25979.14
MEPQ55	25979.15
MEPQ56	25979.16
MEPQ57	25979.17
MEPQ58	25979.18

RECEIVED

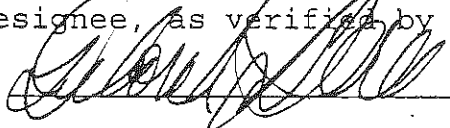
JUL 23 1996

US EPA CENTRAL REGIONAL LAB.  
536 S. CLARK ST.  
CHICAGO, ILLINOIS 60605

Were ICP interelement corrections applied ? Yes/No YES  
Were ICP background corrections applied ? Yes/No YES  
If yes - were raw data generated before application of background corrections ? Yes/No NO

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature:  Name: Deborah J. Beree for...  
Date: July 16, 1996 Title: Jason D. Ruckman  
Inorganic Program Manager

## U.S. EPA - CLP

1  
INORGANIC ANALYSES DATA SHEETEPA SAMPLE NO. **003**MEPQ41 **SSI**

Lab Name: AMERICAN ANALYTICAL Contract: 68-D5-0141

Lab Code: AATS Case No.: 24752 SAS No.: SDG No.: MEPQ41

Matrix (soil/water): SOIL Lab Sample ID: 25979.01

Level (low/med): LOW Date Received: 06/12/96

% Solids: 87.8

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	6080	-		P
7440-36-0	Antimony	8.8	B	N	P
7440-38-2	Arsenic	18.6	-		P
7440-39-3	Barium	6070	-	*	P
7440-41-7	Beryllium	0.70	B		P
7440-43-9	Cadmium	26.8	-	E	P
7440-70-2	Calcium	103000	-		P
7440-47-3	Chromium	2750	-	*	P
7440-48-4	Cobalt	12.5	-		P
7440-50-8	Copper	3450	-	*	P
7439-89-6	Iron	73600	-	*	P
7439-92-1	Lead	14200	-		P
7439-95-4	Magnesium	12500	-		P
7439-96-5	Manganese	577	-		P
7439-97-6	Mercury	6.0	-	*	CV
7440-02-0	Nickel	44.4	-	*E	P
7440-09-7	Potassium	824	B		P
7782-49-2	Selenium	1.1	B		P
7440-22-4	Silver	1.1	B		P
7440-23-5	Sodium	608	B		P
7440-28-0	Thallium	2.4	-		P
7440-62-2	Vanadium	21.3	-		P
7440-66-6	Zinc	6860	-	*	P
	Cyanide	8.8	-	N	CA

Color Before: BLACK Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

## U.S. EPA - CLP

1  
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO. 004

MEPQ42 SS2

Lab Name: AMERICAN ANALYTICAL Contract: 68-D5-0141

Lab Code: AATS Case No.: 24752 SAS No.: SDG No.: MEPQ41

Matrix (soil/water): SOIL Lab Sample ID: 25979.02

Level (low/med): LOW Date Received: 06/12/96

% Solids: 57.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	6990	-		P
7440-36-0	Antimony	165	-	N	P
7440-38-2	Arsenic	35.3	-		P
7440-39-3	Barium	2600	-	*	P
7440-41-7	Beryllium	3.4	-		P
7440-43-9	Cadmium	15.1	-	E	P
7440-70-2	Calcium	63400	-		P
7440-47-3	Chromium	751	-	*	P
7440-48-4	Cobalt	35.0	-		P
7440-50-8	Copper	1950	-	*	P
7439-89-6	Iron	152000	-	*	P
7439-92-1	Lead	16200	-		P
7439-95-4	Magnesium	9550	-		P
7439-96-5	Manganese	1130	-		P
7439-97-6	Mercury	2.3	-	*	CV
7440-02-0	Nickel	108	-	*E	P
7440-09-7	Potassium	892	B		P
7782-49-2	Selenium	3.0	-		P
7440-22-4	Silver	15.6	-		P
7440-23-5	Sodium	574	B		P
7440-28-0	Thallium	3.5	-		P
7440-62-2	Vanadium	20.8	-		P
7440-66-6	Zinc	6580	-	*	P
	Cyanide	4.8	-	N	CA

Color Before: BLACK Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

## U.S. EPA - CLP

1  
INORGANIC ANALYSES DATA SHEETEPA SAMPLE NO. **005**MEPQ43 **SS3**

Lab Name: AMERICAN\_ANALYTICAL\_\_\_\_\_ Contract: 68-D5-0141

Lab Code: AATS\_\_\_\_\_ Case No.: 24752\_ SAS No.: \_\_\_\_\_ SDG No.: MEPQ41

Matrix (soil/water): SOIL\_\_\_\_\_ Lab Sample ID: 25979.03

Level (low/med): LOW\_\_\_\_\_ Date Received: 06/12/96

% Solids: \_\_\_\_\_59.6

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	15700	-		P
7440-36-0	Antimony	60.8	-	N	P
7440-38-2	Arsenic	29.9	-		P
7440-39-3	Barium	1870	-	*	P
7440-41-7	Beryllium	1.1	B		P
7440-43-9	Cadmium	12.2	-	E	P
7440-70-2	Calcium	68200	-		P
7440-47-3	Chromium	425	-	*	P
7440-48-4	Cobalt	23.8	-		P
7440-50-8	Copper	1400	-	*	P
7439-89-6	Iron	146000	-	*	P
7439-92-1	Lead	5800	-		P
7439-95-4	Magnesium	12300	-		P
7439-96-5	Manganese	973	-		P
7439-97-6	Mercury	12.4	-	*	CV
7440-02-0	Nickel	96.3	-	*E	P
7440-09-7	Potassium	1120	B		P
7782-49-2	Selenium	3.1	-		P
7440-22-4	Silver	2.8	B		P
7440-23-5	Sodium	661	B		P
7440-28-0	Thallium	3.8	-		P
7440-62-2	Vanadium	18.7	-		P
7440-66-6	Zinc	5180	-	*	P
	Cyanide	3.0	-	N	CA

Color Before: BLACK\_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: MEDIUM

Color After: YELLOW\_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: \_\_\_\_\_

Comments:

## U.S. EPA - CLP

1  
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO 006

MEPQ44 SS4

Lab Name: AMERICAN\_ANALYTICAL\_\_\_\_\_ Contract: 68-D5-0141

Lab Code: AATS\_\_\_\_\_ Case No.: 24752\_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: MEPQ41

Matrix (soil/water): SOIL\_\_\_\_\_ Lab Sample ID: 25979.04

Level (low/med): LOW\_\_\_\_\_ Date Received: 06/12/96

% Solids: \_\_\_\_\_74.6

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	8980	---	---	P
7440-36-0	Antimony	355	---	N	P
7440-38-2	Arsenic	135	---	---	P
7440-39-3	Barium	1890	---	*	P
7440-41-7	Beryllium	1.3	B	---	P
7440-43-9	Cadmium	13.0	---	E <sup>9</sup>	P
7440-70-2	Calcium	60100	---	---	P
7440-47-3	Chromium	409	---	*	P
7440-48-4	Cobalt	26.1	---	---	P
7440-50-8	Copper	6390	---	*	P
7439-89-6	Iron	183000	---	*	P
7439-92-1	Lead	17900	---	---	P
7439-95-4	Magnesium	7910	---	---	P
7439-96-5	Manganese	1090	---	---	P
7439-97-6	Mercury	2.6	---	*	CV
7440-02-0	Nickel	151	---	* E <sup>9</sup>	P
7440-09-7	Potassium	1520	---	---	P
7782-49-2	Selenium	3.3	---	---	P
7440-22-4	Silver	3.5	---	---	P
7440-23-5	Sodium	1100	B	---	P
7440-28-0	Thallium	4.1	---	---	P
7440-62-2	Vanadium	19.7	---	---	P
7440-66-6	Zinc	16100	---	*	P
	Cyanide	7.3	---	N	CA

Color Before: BLACK\_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: MEDIUM

Color After: YELLOW\_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: \_\_\_\_\_

Comments:



## U.S. EPA - CLP

1  
INORGANIC ANALYSES DATA SHEETEPA SAMPLE **N007**MEPQ45 **SS5**

Lab Name: AMERICAN ANALYTICAL \_\_\_\_\_ Contract: 68-D5-0141

Lab Code: AATS \_\_\_\_\_ Case No.: 24752 \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: MEPQ41

Matrix (soil/water): SOIL \_\_\_\_\_ Lab Sample ID: 25979.05

Level (low/med): LOW \_\_\_\_\_ Date Received: 06/12/96

% Solids: \_\_\_\_\_ 87.1

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3130	-	-	P
7440-36-0	Antimony	7.4	B	N	P
7440-38-2	Arsenic	9.4	-	-	P
7440-39-3	Barium	316	-	*	P
7440-41-7	Beryllium	7.1	-	-	P
7440-43-9	Cadmium	3.7	-	E <sup>4</sup>	P
7440-70-2	Calcium	64800	-	-	P
7440-47-3	Chromium	140	-	*	P
7440-48-4	Cobalt	42.9	-	-	P
7440-50-8	Copper	1830	-	*	P
7439-89-6	Iron	20800	-	*	P
7439-92-1	Lead	782	-	-	P
7439-95-4	Magnesium	10400	-	-	P
7439-96-5	Manganese	306	-	-	P
7439-97-6	Mercury	0.47	-	*	CV
7440-02-0	Nickel	24.7	-	*E <sup>4</sup>	P
7440-09-7	Potassium	644	B	-	P
7782-49-2	Selenium	0.69	U	-	P
7440-22-4	Silver	0.52	B	-	P
7440-23-5	Sodium	323	B	-	P
7440-28-0	Thallium	0.92	U	-	P
7440-62-2	Vanadium	9.7	B	-	P
7440-66-6	Zinc	980	-	*	P
	Cyanide	1.3	-	N	CA

Color Before: GREY \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: MEDIUM

Color After: YELLOW \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: \_\_\_\_\_

Comments:

## U.S. EPA - CLP

1  
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO. 008

MEPQ46 SS6

Lab Name: AMERICAN\_ANALYTICAL\_\_\_\_\_ Contract: 68-D5-0141

Lab Code: AATS\_\_\_\_\_ Case No.: 24752\_ SAS No.: \_\_\_\_\_ SDG No.: MEPQ41

Matrix (soil/water): SOIL\_\_\_\_\_ Lab Sample ID: 25979.06

Level (low/med): LOW\_\_\_\_\_ Date Received: 06/12/96

% Solids: \_\_\_\_\_78.6

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4220	—	—	P
7440-36-0	Antimony	4.1	B	N	P
7440-38-2	Arsenic	6.5	—	—	P
7440-39-3	Barium	583	—	*	P
7440-41-7	Beryllium	0.27	B	—	P
7440-43-9	Cadmium	5.2	—	E <sup>SR</sup>	P
7440-70-2	Calcium	165000	—	—	P
7440-47-3	Chromium	160	—	*	P
7440-48-4	Cobalt	5.6	B	—	P
7440-50-8	Copper	63.4	—	*	P
7439-89-6	Iron	32200	—	*	P
7439-92-1	Lead	726	—	—	P
7439-95-4	Magnesium	28300	—	—	P
7439-96-5	Manganese	370	—	—	P
7439-97-6	Mercury	0.76	—	*	CV
7440-02-0	Nickel	98.6	—	*E <sup>SR</sup>	P
7440-09-7	Potassium	908	B	—	P
7782-49-2	Selenium	0.76	U	—	P
7440-22-4	Silver	0.51	U	—	P
7440-23-5	Sodium	1040	B	—	P
7440-28-0	Thallium	1.0	U	—	P
7440-62-2	Vanadium	12.9	—	—	P
7440-66-6	Zinc	656	—	*	P
	Cyanide	1.3	—	N	CA

Color Before: BLACK\_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: MEDIUM

Color After: YELLOW\_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: \_\_\_\_\_

Comments:

1  
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

Lab Name: AMERICAN\_ANALYTICAL\_\_\_\_\_ Contract: 68-D5-0141

MEPQ47 SS7

Lab Code: AATS\_\_\_\_\_ Case No.: 24752\_ SAS No.: \_\_\_\_\_ SDG No.: MEPQ41

Matrix (soil/water): SOIL\_\_\_\_\_ Lab Sample ID: 25979.07

Level (low/med): LOW\_\_\_\_\_ Date Received: 06/12/96

% Solids: \_\_\_\_\_ 97.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4330	—	—	P
7440-36-0	Antimony	25.2	—	N	P
7440-38-2	Arsenic	16.1	—	—	P
7440-39-3	Barium	377	—	*	P
7440-41-7	Beryllium	0.32	B	—	P
7440-43-9	Cadmium	13.0	—	E <sup>st</sup>	P
7440-70-2	Calcium	69200	—	—	P
7440-47-3	Chromium	175	—	*	P
7440-48-4	Cobalt	9.9	B	—	P
7440-50-8	Copper	468	—	*	P
7439-89-6	Iron	96800	—	*	P
7439-92-1	Lead	854	—	—	P
7439-95-4	Magnesium	12600	—	—	P
7439-96-5	Manganese	664	—	—	P
7439-97-6	Mercury	5.9	—	*	CV
7440-02-0	Nickel	92.2	—	* E <sup>st</sup>	P
7440-09-7	Potassium	458	B	—	P
7782-49-2	Selenium	1.5	—	—	P
7440-22-4	Silver	0.87	B	—	P
7440-23-5	Sodium	1670	—	—	P
7440-28-0	Thallium	2.8	—	—	P
7440-62-2	Vanadium	17.6	—	—	P
7440-66-6	Zinc	787	—	*	P
	Cyanide	1.1	—	N	CA

Color Before: BROWN\_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: MEDIUM

Color After: YELLOW\_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: \_\_\_\_\_

Comments:

## U.S. EPA - CLP

1  
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO. 010

Lab Name: AMERICAN ANALYTICAL Contract: 68-D5-0141

MEPQ48 SS8

Lab Code: AATS Case No.: 24752 SAS No.: SDG No.: MEPQ41

Matrix (soil/water): SOIL Lab Sample ID: 25979.08

Level (low/med): LOW Date Received: 06/12/96

% Solids: 72.3

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3940	—	—	P
7440-36-0	Antimony	6.5	B	N	P
7440-38-2	Arsenic	11.1	—	—	P
7440-39-3	Barium	341	—	*	P
7440-41-7	Beryllium	0.48	B	—	P
7440-43-9	Cadmium	5.9	—	E*	P
7440-70-2	Calcium	76300	—	—	P
7440-47-3	Chromium	239	—	*	P
7440-48-4	Cobalt	12.0	B	—	P
7440-50-8	Copper	619	—	*	P
7439-89-6	Iron	86500	—	*	P
7439-92-1	Lead	1310	—	—	P
7439-95-4	Magnesium	19500	—	—	P
7439-96-5	Manganese	996	—	—	P
7439-97-6	Mercury	0.87	—	*	CV
7440-02-0	Nickel	168	—	*E*	P
7440-09-7	Potassium	1060	B	—	P
7782-49-2	Selenium	0.94	B	—	P
7440-22-4	Silver	0.55	U	—	P
7440-23-5	Sodium	979	B	—	P
7440-28-0	Thallium	2.3	B	—	P
7440-62-2	Vanadium	15.6	—	—	P
7440-66-6	Zinc	1350	—	*	P
	Cyanide	1.9	—	N	CA

Color Before: BLACK Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

## U.S. EPA - CLP

1  
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

Lab Name: AMERICAN\_ANALYTICAL\_\_\_\_\_ Contract: 68-D5-0141

MEPQ49 559

011

Lab Code: AATS\_\_\_\_\_ Case No.: 24752\_ SAS No.: \_\_\_\_\_ SDG No.: MEPQ41

Matrix (soil/water): SOIL\_\_\_\_\_ Lab Sample ID: 25979.09

Level (low/med): LOW\_\_\_\_\_ Date Received: 06/12/96

% Solids: \_\_\_\_\_ 63.9

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	5150	-		P
7440-36-0	Antimony	11.0	B	N	P
7440-38-2	Arsenic	23.8	-		P
7440-39-3	Barium	3900	-	*	P
7440-41-7	Beryllium	0.56	B		P
7440-43-9	Cadmium	12.9	-	E*	P
7440-70-2	Calcium	59400	-		P
7440-47-3	Chromium	77.4	-	*	P
7440-48-4	Cobalt	19.4	-		P
7440-50-8	Copper	467	-	*	P
7439-89-6	Iron	141000	-	*	P
7439-92-1	Lead	2580	-		P
7439-95-4	Magnesium	6850	-		P
7439-96-5	Manganese	829	-		P
7439-97-6	Mercury	1.0	-	*	CV
7440-02-0	Nickel	62.8	-	* E*	P
7440-09-7	Potassium	1290	B		P
7782-49-2	Selenium	2.9	-		P
7440-22-4	Silver	0.63	U		P
7440-23-5	Sodium	885	B		P
7440-28-0	Thallium	5.7	-		P
7440-62-2	Vanadium	17.1	-		P
7440-66-6	Zinc	3530	-	*	P
	Cyanide	1.7	-	N	CA

Color Before: BROWN\_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: MEDIUM

Color After: YELLOW\_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: \_\_\_\_\_

Comments:

## U.S. EPA - CLP

1  
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO. 012

Lab Name: AMERICAN\_ANALYTICAL\_\_\_\_\_ Contract: 68-D5-0141

MEPQ50 SS10

Lab Code: AATS\_\_\_\_\_ Case No.: 24752\_ SAS No.: \_\_\_\_\_ SDG No.: MEPQ41

Matrix (soil/water): SOIL\_\_\_\_\_ Lab Sample ID: 25979.10

Level (low/med): LOW\_\_\_\_\_ Date Received: 06/12/96

% Solids: \_\_\_\_\_ 59.5

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	5450	—	—	P
7440-36-0	Antimony	4.0	B	N	P
7440-38-2	Arsenic	31.2	—	—	P
7440-39-3	Barium	2960	—	*	P
7440-41-7	Beryllium	0.53	B	—	P
7440-43-9	Cadmium	14.2	—	E <sup>sr</sup>	P
7440-70-2	Calcium	62900	—	—	P
7440-47-3	Chromium	186	—	*	P
7440-48-4	Cobalt	21.2	—	—	P
7440-50-8	Copper	240	—	*	P
7439-89-6	Iron	201000	—	*	P
7439-92-1	Lead	2370	—	—	P
7439-95-4	Magnesium	9170	—	—	P
7439-96-5	Manganese	951	—	—	P
7439-97-6	Mercury	10.2	—	*	CV
7440-02-0	Nickel	79.7	—	* E <sup>sr</sup>	P
7440-09-7	Potassium	1230	B	—	P
7782-49-2	Selenium	3.4	—	—	P
7440-22-4	Silver	0.67	U	—	P
7440-23-5	Sodium	889	B	—	P
7440-28-0	Thallium	7.4	—	—	P
7440-62-2	Vanadium	17.8	—	—	P
7440-66-6	Zinc	3180	—	*	P
	Cyanide	3.2	—	N	CA

Color Before: BLACK\_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: MEDIUM

Color After: YELLOW\_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: \_\_\_\_\_

Comments:

## U.S. EPA - CLP

1  
INORGANIC ANALYSES DATA SHEETEPA SAMPLE NO. **013**

MEPQ51 SS11

Lab Name: AMERICAN ANALYTICAL Contract: 68-D5-0141

Lab Code: AATS Case No.: 24752 SAS No.: SDG No.: MEPQ41

Matrix (soil/water): SOIL Lab Sample ID: 25979.11

Level (low/med): LOW Date Received: 06/12/96

% Solids: 84.9

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	8370	-		P
7440-36-0	Antimony	0.93	B	N	P
7440-38-2	Arsenic	11.9	-		P
7440-39-3	Barium	116	-	*	P
7440-41-7	Beryllium	0.63	B		P
7440-43-9	Cadmium	3.4	-	ES	P
7440-70-2	Calcium	40400	-		P
7440-47-3	Chromium	21.0	-	*	P
7440-48-4	Cobalt	7.1	B		P
7440-50-8	Copper	44.4	-	*	P
7439-89-6	Iron	27500	-	*	P
7439-92-1	Lead	162	-		P
7439-95-4	Magnesium	9400	-		P
7439-96-5	Manganese	284	-		P
7439-97-6	Mercury	0.50	-	*	CV
7440-02-0	Nickel	19.5	-	*ES	P
7440-09-7	Potassium	1600	-		P
7782-49-2	Selenium	0.71	U		P
7440-22-4	Silver	0.47	U		P
7440-23-5	Sodium	285	B		P
7440-28-0	Thallium	0.94	U		P
7440-62-2	Vanadium	29.0	-		P
7440-66-6	Zinc	136	-	*	P
	Cyanide	0.27	B	N	CA

Color Before: GREY Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

1  
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

Lab Name: AMERICAN\_ANALYTICAL\_\_\_\_\_ Contract: 68-D5-0141

MEPQ52 SS/2

Lab Code: AATS\_\_\_\_\_ Case No.: 24752\_ SAS No.: \_\_\_\_\_ SDG No.: MEPQ41

Matrix (soil/water): SOIL\_\_\_\_\_ Lab Sample ID: 25979.12

Level (low/med): LOW\_\_\_\_\_ Date Received: 06/12/96

% Solids: \_\_\_\_\_ 83.4

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4130	—	—	P
7440-36-0	Antimony	6.8	B	N	P
7440-38-2	Arsenic	19.2	—	—	P
7440-39-3	Barium	346	—	*	P
7440-41-7	Beryllium	0.24	U	—	P
7440-43-9	Cadmium	36.1	—	E*	P
7440-70-2	Calcium	79600	—	—	P
7440-47-3	Chromium	42.6	—	*	P
7440-48-4	Cobalt	9.8	B	—	P
7440-50-8	Copper	131	—	*	P
7439-89-6	Iron	132000	—	*	P
7439-92-1	Lead	343	—	—	P
7439-95-4	Magnesium	8140	—	—	P
7439-96-5	Manganese	572	—	—	P
7439-97-6	Mercury	1.8	—	*	CV
7440-02-0	Nickel	42.0	—	*E*	P
7440-09-7	Potassium	826	B	—	P
7782-49-2	Selenium	1.2	—	—	P
7440-22-4	Silver	0.48	U	—	P
7440-23-5	Sodium	358	B	—	P
7440-28-0	Thallium	3.0	—	—	P
7440-62-2	Vanadium	10.5	B	—	P
7440-66-6	Zinc	360	—	*	P
	Cyanide	1.2	—	N	CA

Color Before: GREY\_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: MEDIUM

Color After: YELLOW\_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: \_\_\_\_\_

Comments:



1  
INORGANIC ANALYSES DATA SHEET

015  
EPA SAMPLE NO.

MEPQ53 **SSB**

Lab Name: AMERICAN\_ANALYTICAL\_\_\_\_\_ Contract: 68-D5-0141

Lab Code: AATS\_\_\_\_\_ Case No.: 24752\_ SAS No.: \_\_\_\_\_ SDG No.: MEPQ41

Matrix (soil/water): SOIL\_\_\_\_\_ Lab Sample ID: 25979.13

Level (low/med): LOW\_\_\_\_\_ Date Received: 06/12/96

% Solids: \_\_\_\_\_71.2

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	339000	—	—	P
7440-36-0	Antimony	9.4	B	N	P
7440-38-2	Arsenic	0.84	U	—	P
7440-39-3	Barium	1930	—	*	P
7440-41-7	Beryllium	0.28	U	—	P
7440-43-9	Cadmium	17.6	—	E <sup>st</sup>	P
7440-70-2	Calcium	3720	—	—	P
7440-47-3	Chromium	91.6	—	*	P
7440-48-4	Cobalt	2.7	B	—	P
7440-50-8	Copper	16100	—	*	P
7439-89-6	Iron	9500	—	*	P
7439-92-1	Lead	479	—	—	P
7439-95-4	Magnesium	5950	—	—	P
7439-96-5	Manganese	1930	—	—	P
7439-97-6	Mercury	0.39	—	*	CV
7440-02-0	Nickel	32.2	—	*E <sup>st</sup>	P
7440-09-7	Potassium	260	B	—	P
7782-49-2	Selenium	0.84	U	—	P
7440-22-4	Silver	0.56	U	—	P
7440-23-5	Sodium	576	B	—	P
7440-28-0	Thallium	4.8	—	—	P
7440-62-2	Vanadium	11.3	B	—	P
7440-66-6	Zinc	1340	—	*	P
	Cyanide	7.0	—	N	CA

Color Before: GREY\_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: MEDIUM

Color After: YELLOW\_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: \_\_\_\_\_

Comments:

## U.S. EPA - CLP

1  
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO. 016

MEPQ54 SS14

Lab Name: AMERICAN\_ANALYTICAL\_\_\_\_\_ Contract: 68-D5-0141

Lab Code: AATS\_\_\_\_\_ Case No.: 24752\_ SAS No.: \_\_\_\_\_ SDG No.: MEPQ41

Matrix (soil/water): SOIL\_\_\_\_\_ Lab Sample ID: 25979.14

Level (low/med): LOW\_\_\_\_\_ Date Received: 06/12/96

% Solids: \_\_\_\_\_ 60.6

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	305000	—	—	P
7440-36-0	Antimony	4.7	B	N	P
7440-38-2	Arsenic	0.99	U	—	P
7440-39-3	Barium	103	—	*	P
7440-41-7	Beryllium	0.33	U	—	P
7440-43-9	Cadmium	4.3	—	ES	P
7440-70-2	Calcium	1830	—	—	P
7440-47-3	Chromium	79.2	—	*	P
7440-48-4	Cobalt	0.93	B	—	P
7440-50-8	Copper	14300	—	*	P
7439-89-6	Iron	2360	—	*	P
7439-92-1	Lead	87.4	—	—	P
7439-95-4	Magnesium	5010	—	—	P
7439-96-5	Manganese	1780	—	—	P
7439-97-6	Mercury	0.22	—	*	CV
7440-02-0	Nickel	23.3	—	* ES	P
7440-09-7	Potassium	132	B	—	P
7782-49-2	Selenium	0.99	U	—	P
7440-22-4	Silver	0.83	B	—	P
7440-23-5	Sodium	371	B	—	P
7440-28-0	Thallium	4.6	—	—	P
7440-62-2	Vanadium	13.4	B	—	P
7440-66-6	Zinc	405	—	*	P
	Cyanide	0.47	B	N	CA

Color Before: GREY\_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: MEDIUM

Color After: YELLOW\_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: \_\_\_\_\_

Comments:

## U.S. EPA - CLP

1  
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO. 017

Lab Name: AMERICAN\_ANALYTICAL Contract: 68-D5-0141

MEPQ55 SS15

Lab Code: AATS Case No.: 24752 SAS No.: SDG No.: MEPQ41

Matrix (soil/water): SOIL Lab Sample ID: 25979.15

Level (low/med): LOW Date Received: 06/12/96

% Solids: 63.6

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	177000	-		P
7440-36-0	Antimony	707	-	N	P
7440-38-2	Arsenic	61.4	-		P
7440-39-3	Barium	547	-	*	P
7440-41-7	Beryllium	0.31	U		P
7440-43-9	Cadmium	12.4	-	E*	P
7440-70-2	Calcium	28800	-		P
7440-47-3	Chromium	144	-	*	P
7440-48-4	Cobalt	8.6	B		P
7440-50-8	Copper	9360	-	*	P
7439-89-6	Iron	124000	-	*	P
7439-92-1	Lead	45900	-		P
7439-95-4	Magnesium	5930	-		P
7439-96-5	Manganese	1560	-		P
7439-97-6	Mercury	2.4	-	*	CV
7440-02-0	Nickel	47.6	-	*E*	P
7440-09-7	Potassium	231	B		P
7782-49-2	Selenium	2.2	-		P
7440-22-4	Silver	9.3	-		P
7440-23-5	Sodium	539	B		P
7440-28-0	Thallium	3.4	-		P
7440-62-2	Vanadium	11.3	B		P
7440-66-6	Zinc	3660	-	*	P
	Cyanide	2.9	-	N	CA

Color Before: GREY Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

1  
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

Lab Name: AMERICAN\_ANALYTICAL\_\_\_\_\_ Contract: 68-D5-0141

MEPQ56 SS(6)

Lab Code: AATS\_\_\_\_\_ Case No.: 24752\_ SAS No.: \_\_\_\_\_ SDG No.: MEPQ41

Matrix (soil/water): SOIL\_\_\_\_\_ Lab Sample ID: 25979.16

Level (low/med): LOW\_\_\_\_\_ Date Received: 06/12/96

% Solids: \_\_\_\_\_58.6

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	134000	-		P
7440-36-0	Antimony	55.7	-	N	P
7440-38-2	Arsenic	17.0	-		P
7440-39-3	Barium	775	-	*	P
7440-41-7	Beryllium	1.9	-		P
7440-43-9	Cadmium	30.8	-	ER	P
7440-70-2	Calcium	50700	-		P
7440-47-3	Chromium	138	-	*	P
7440-48-4	Cobalt	17.1	-		P
7440-50-8	Copper	6970	-	*	P
7439-89-6	Iron	64800	-	*	P
7439-92-1	Lead	1630	-		P
7439-95-4	Magnesium	5940	-		P
7439-96-5	Manganese	1270	-		P
7439-97-6	Mercury	5.0	-	*	CV
7440-02-0	Nickel	41.9	-	*ER	P
7440-09-7	Potassium	828	B		P
7782-49-2	Selenium	1.0	U		P
7440-22-4	Silver	1.2	B		P
7440-23-5	Sodium	1530	B		P
7440-28-0	Thallium	3.2	B		P
7440-62-2	Vanadium	19.0	-		P
7440-66-6	Zinc	3270	-	*	P
	Cyanide	3.4	-	N	CA

Color Before: GREY\_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: MEDIUM

Color After: YELLOW\_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: \_\_\_\_\_

Comments:

## U.S. EPA - CLP

1  
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO 019

Lab Name: AMERICAN ANALYTICAL Contract: 68-D5-0141

MEPQ57 SS17

Lab Code: AATS Case No.: 24752 SAS No.: SDG No.: MEPQ41

Matrix (soil/water): SOIL Lab Sample ID: 25979.17

Level (low/med): LOW Date Received: 06/12/96

% Solids: 70.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	39700	-		P
7440-36-0	Antimony	75.7	-	N	P
7440-38-2	Arsenic	19.2	-		P
7440-39-3	Barium	1950	-	*	P
7440-41-7	Beryllium	0.56	B		P
7440-43-9	Cadmium	11.7	-	E*	P
7440-70-2	Calcium	38000	-		P
7440-47-3	Chromium	1410	-	*	P
7440-48-4	Cobalt	29.1	-		P
7440-50-8	Copper	2090	-	*	P
7439-89-6	Iron	83200	-	*	P
7439-92-1	Lead	10300	-		P
7439-95-4	Magnesium	6630	-		P
7439-96-5	Manganese	743	-		P
7439-97-6	Mercury	8.3	-	*	CV
7440-02-0	Nickel	57.7	-	*E*	P
7440-09-7	Potassium	783	B		P
7782-49-2	Selenium	1.1	B		P
7440-22-4	Silver	0.81	B		P
7440-23-5	Sodium	1050	B		P
7440-28-0	Thallium	2.8	B		P
7440-62-2	Vanadium	14.8	-		P
7440-66-6	Zinc	4490	-	*	P
	Cyanide	5.8	-	N	CA

Color Before: BLACK Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

## U.S. EPA - CLP

1  
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO. 020

MEPQ58 SS18

Lab Name: AMERICAN ANALYTICAL Contract: 68-D5-0141

Lab Code: AATS Case No.: 24752 SAS No.: SDG No.: MEPQ41

Matrix (soil/water): SOIL Lab Sample ID: 25979.18

Level (low/med): LOW Date Received: 06/12/96

% Solids: 89.6

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	20600	-		P
7440-36-0	Antimony	11.5	B	N	P
7440-38-2	Arsenic	15.8	-		P
7440-39-3	Barium	1710	-	*	P
7440-41-7	Beryllium	12.7	-		P
7440-43-9	Cadmium	12.9	-	EST	P
7440-70-2	Calcium	67300	-		P
7440-47-3	Chromium	138	-	*	P
7440-48-4	Cobalt	85.1	-		P
7440-50-8	Copper	4590	-	*	P
7439-89-6	Iron	95700	-	*	P
7439-92-1	Lead	2230	-		P
7439-95-4	Magnesium	9900	-		P
7439-96-5	Manganese	971	-		P
7439-97-6	Mercury	3.0	-	*	CV
7440-02-0	Nickel	77.7	-	*EST	P
7440-09-7	Potassium	657	B		P
7782-49-2	Selenium	1.1	B		P
7440-22-4	Silver	2.1	B		P
7440-23-5	Sodium	602	B		P
7440-28-0	Thallium	3.0	-		P
7440-62-2	Vanadium	24.2	-		P
7440-66-6	Zinc	2490	-	*	P
	Cyanide	2.8	-	N	CA

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:



# Surface Water Org

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION V

DATE:

SUBJECT: Review of Region V CLP Data  
Received for Review on

July 23, 1996

FROM: Stephen L. Ostrodka, Chief (HSRL-5J)  
Superfund Technical Support Section

Mr. Steve Ostrodka  
Richard Z Byrns  
8/12/96

TO: Data User:

~~CDM~~ MDNR

We have reviewed the data for the following case:

SITE NAME:

S.E. Rockford <sup>GB</sup> G.W. (IL) (MI) Carter Color Coat

CASE NUMBER:

24750 24752

SDG NUMBER:

EZD19

Number and Type of Samples:

4 (water)

Sample Numbers:

EZD 19-22

Laboratory:

SWOK

Hrs. for Review:

5.6

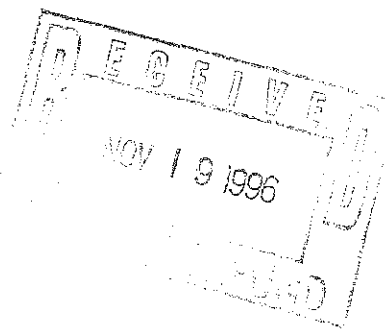
0.5

Following are our findings:

The data are usable and acceptable with the qualifications described in the attached narrative.

Richard Z Byrns  
8/12/96

Date Rec'd 8-22-96



cc: Regional TPO  
Brian Freeman  
HSMC-5J



NARRATIVE

Contractor: SWOK

Case: 24750 24752

Site: ~~S. E. Rockford GW (IL)~~  
Carter Color Coat

SDG: EZD19

This case consists of 4 water samples EXD19-22, one of which was a water field QC sample EZD19. These samples were all collected on June 11, 1996 and were received by the laboratory on June 12, 1996. All samples were analyzed for volatiles, semi-volatiles and pesticides/PCBs organic analytes. All samples were to be analyzed according to CLP SOW OLM03.2.

Sample EZD20 was the matrix spike sample for both the VOA , SVOA, pesticide/PCBs. Samples EZD21 and EZD22 were field duplicates.

All volatiles were analyzed within the 14 day hold time for preserved water samples, the semivolatile and pesticide/PCB samples were extracted within the 7 day holding time for water samples, and analyzed within the 40 day hold time; therefore, the results are acceptable.

The reviewer's narrative and data qualifiers are noted in the following pages.

Reviewed by: M. Kaminsky Lockheed ESAT

Date: August 9, 1996

# NARRATIVE

Contractor: SWOK  
Site: ~~S. E. Rockford GW (IL)~~  
*Carter Color Coat*

Case: ~~24750~~ *24752*  
SDG: EZD19

## 1.HOLDING TIMES

This case consists of 4 water samples EXD19-22, one of which was a water field QC sample EZD19. These samples were all collected on June 11, 1996 and were received by the laboratory on June 12, 1996. All samples were analyzed for volatiles, semi-volatiles and pesticides/PCBs organic analytes. All samples were to be analyzed according to CLP SOW OLM03.2..

All volatiles were analyzed within the 14 day hold time for preserved water samples, the semivolatile and pesticide/PCB samples were extracted within the 7 day holding time for water samples, and analyzed within the 40 day hold time; therefore, the results are acceptable.

## 2.GC/MS TUNING

All GC/MS tuning complied with the mass list and ion abundance criteria for BFB and DFTPP, and all samples were analyzed within the 12 hour periods for instrument performance checks.

The GC Resolution check mix met the 60% resolution criteria. Endrin and DDT degradation checks using PEM MIX on both columns, 20%; therefore the results are acceptable.

## 3.CALIBRATION

Initial and continuing calibrations of the volatile, semivolatile, and pesticide/PCBs were evaluated for the target compound list and outliers are recorded on the forms included as part of the narrative.

## 4.BLANKS

### VOA:

Volatile blank VBLK1 contained the common laboratory chemicals methylene chloride and acetone. Volatile blank VBLK2 contained the common laboratory chemical acetone. The presence of these common laboratory chemicals in any sample associated with the blanks is flagged as undetected (U) when the sample results are less than ten (10) times the blank concentration. The volatile method blank summary (Form IV VOA) lists the sample associated with each blank.

### SVOA:

SBLKS1 was the water blank, and it contained the common laboratory chemical bis (2-ethylhexyl)phthalate and 5 TICs. The presence of this common laboratory chemical in any sample associated with this blank is flagged as undetected (U) when the sample results are less than ten (10) times the blank concentration; the presence of any of the TICs in the associated samples is flagged undetected (U) when the sample results are less than five (5) times the blank

Reviewed by: M. Kaminsky Lockheed ESAT

Date: August 9, 1996

**NARRATIVE**

Contractor: SWOK Case: 24750  
Site: S. E. Rockford GW (IL) SDG: EZD19

concentration. The semivolatile method blank summary (Form IV SVOA) lists the sample associated with each blank.

**PESTICIDE/PCB:**

PBLKWB was the pesticide water blank and was found to be clean.

**5.SYSTEM MONITORING COMPOUND AND SURROGATE RECOVERY**

**VOA:**

No problems were observed.

**SVOA:**

The semi-volatile fraction no problems were observed.

**PESTICIDE/PCB:**

The pesticide/PCB fraction had no problems.

**6.MATRIX SPIKE/MATRIX SPIKE DUPLICATE**

EZD20 was used as the soil MS/MSD for all fractions.

**VOA:**

All spike recoveries and %RPDs for the volatile soil samples were within QC limits; therefore, the results are acceptable.

**SVOA:**

The MSD %REC was below the QC limit for N-nitroso-di-n-propylamine. Positive detects of this compound in the unspiked sample should be considered estimated (J), and nondetects as estimated (UJ).

**PESTICIDE/PCB:**

The MS and MSD %REC was low and out of control for gamma-BHC. Positive detects of this compound in the unspiked sample should be considered as estimated (J), and nondetects as estimated (UJ).

**7.FIELD BLANKS AND FIELD DUPLICATES**

Sample EZD19 was listed as the field QC sample. This sample was clean for all fractions. Samples EZD21 and 22 are field duplicates, EZD22 contains 2-butanone. In the semivolatile fraction EZD21 contained 3 TCLs and 34 TICs while EXZ22 contained 6 TCLs and 36 TICs

**8.INTERNAL STANDARDS**

**VOA:**

No problems were reported.

**SVOA:**

In the semivolatile fraction IS5 (chrysene-d12) was out in samples EZD21, EZD22, EZD20MS, EZD20MSD, EZX21RE, and EZD22RE. IS6 (perylene-d12) was out in

Reviewed by: M. Kaminsky Lockheed ESAT  
Date: August 9, 1996

**NARRATIVE**

Contractor: SWOK Case: 24750  
Site: S. E. Rockford GW (IL) SDG: EZD19

samples EZD20, EZD21, EZD22, EZD20MS, EZD20MSD, EZX21RE, and EZD22RE. Positive detects of the associated compounds in these samples should be considered as estimated (J). Please refer to Table 4.

**PESTICIDE/PCB:**

No problems were reported.

**9.COMPOUND IDENTIFICATION**

After reviewing the mass spectra and chromatograms it appears that all VOA, SVOA, and pesticide/PCBs, compounds were properly identified.

**10.COMPOUND QUANTITATION AND REPORTED DETECTION LIMITS**

All CRQLs were properly reported and no dilutions were done. All target compounds were properly reported.

**11.SYSTEM PERFORMANCE**

GC/MS and GC baselines indicated acceptable performance.

**12.ADDITIONAL INFORMATION**

None.

Reviewed by: M. Kaminsky Lockheed ESAT  
Date: August 9, 1996



SOUTHWEST LABORATORY OF OKLAHOMA  
1700 West Albany, Suite A / Broken Arrow, OK 74012  
918-251-2858

SDG NARRATIVE

July 15, 1996

CONTRACT NO.: 68-D5-0021  
CASE NO.: 24752  
SAMPLE NOS.: EZD19, EZD20, EZD20MS, EZD20MSD, EZD21, EZD22  
SDG NO.: EZD19

---

VOLATILE FRACTION

Four water samples were submitted for Volatile Organic Analysis. The samples were analyzed by GC/MS following the OLM03.2 CLP Statement of Work.

Alternate columns used for the analysis of volatile compounds by Method OLM03.2 are the Restek XTI-5 (bonded 5% phenyl-95% dimethyl polysiloxane), 30m, 0.25mm ID, 1um film thickness (Restek #12253) and the DB624, 75m, 0.53mmID Megabore, 3um film thickness (J&W 125-1374).

An alternate trap used for the analysis of volatile compounds by method OLM03.2 is the Vocab 3000 (Carbopack B/Carboxen 1000 & 1001; Tekmar #2-1066).

The following samples in this SDG (labeled with an "RE") are considered billable since reanalysis was performed to verify internal standard area recoveries: EASG3RE.

No major problems occurred during the analyses of these samples.

Blanks: VBLK1 contained low level Methylene Chloride contamination below the CRQL and Acetone contamination less than five times the CRQL. VBLK2 contained low level Acetone contamination below the CRQL. VHBLK1 contained low level Methylene Chloride below the CRQL.

Surrogates: No problems.

Matrix Spikes: No problems.

Internal Standards: No problems.

NOTE: All manual integrations in this data package for GC/MS Volatiles have been performed for one of the following reasons:

- a. Data system missed peak during acquisition.
- b. Data system improperly integrated peak.

If water samples are contained in this case, their pH data is included on the page accompanying this SDG narrative.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager, or his designee, as verified by the following signature.



Harry M. Borg  
Organic Program Manager

July 15, 1996

SOUTHWEST LABORATORY OF OKLAHOMA  
1700 West Albany, Suite A / Broken Arrow, OK 74012  
918-251-2858

SDG NARRATIVE

July 2, 1996

CONTRACT NO.: 68-D5-0021

CASE NO.: 24752

SAMPLE NOS.: EZD19, EZD20, EZD20MS, EZD20MSD, EZD21, EZD21RE, EZD22,  
EZD22RE

SDG NO.: EZD19

---

SEMIVOLATILE FRACTION

Four water samples were submitted for Semivolatile Organic Analyses. The samples were analyzed by GC/MS following the OLM03.2 CLP Organic Statement of Work.

The following column is used for the semivolatile analysis: Restek XTI-5 (bonded 5% phenyl-95% dimethyl polysiloxane), 30m, 0.25mm ID, 0.25um film thickness (Restek #12223).

The following samples in this SDG (labeled with an "RE") are considered billable since re-analysis was performed to verify internal standard area recoveries: EZD21RE, EZD22RE

No major problems occurred during the analyses of these samples.

The following samples had alkanes reported and the reports are included at the end of this SDG narrative: EZD20, EZD21, EZD22, EZD22RE

Blanks: SBLK1 had low level phthalate contamination below CRQL.

Surrogates: No problems.

Matrix Spikes: EZD20MSD had low recovery N-nitroso-di-n-propylamine at 36%.

Internal Standard: The following samples had internal standard areas outside QC limits (low): EZD21, EZD22, EZD22RE, EZD20, EZD20MS, EZD20MSD.

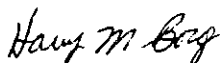
NOTE: All manual integrations in this data package for GC/MS Volatiles/Semivolatiles have been performed for one of the following reasons:

- a. Data system missed peak during acquisition.
- b. Data system improperly integrated peak.



If water samples are contained in this case, their pH data is included on the page accompanying this SDG narrative.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager, or his designee, as verified by the following signature.



Harry M. Borg  
Organic Program Manager

July 2, 1996

## Southwest Laboratory of Oklahoma

### SDG Narrative

Case: 24752  
SDG: EZD19  
Contract: 68-D5-0021  
Samples: EZD19, EZD20, EZD21, EZD22.  
Fraction: Pesticide/PCB

SDG EZD19 consisted of 4 water samples which were analyzed for pesticide/PCBs. All samples, blanks and spikes were extracted and analyzed according to EPA SOW OLM03.2. The samples were analyzed on J&W Scientific dual analytical columns (30m x 0.32mm ID, 0.25µm film thickness, DB-17 and DB-1701). The DB-17 phase consists of (50%-Phenyl) Methylpolysiloxane and the DB-1701 phase consists of (14%-Cyanopropylphenyl) Methylpolysiloxane. These columns were specifically designed for pesticide/PCB separation as required by the EPA's SOW. All applicable manufacturer's instructions were followed for the analysis of pesticides/PCBs. Manufacturer provided information concerning the performance characteristics of the column are kept on site.

Surrogate recoveries of all method blanks were within limits. The MS/MSD exhibited low recovery for gamma-BHC. All other compounds are within recovery limits.

The following tables list the total nanograms injected on column for each calibration standard based upon amount injected on column, 1µL or 2µL:

#### RESOLUTION CHECK

Compounds	Total nanograms (1µL)	Total nanograms (2µL)
gamma-Chlordane	0.01	0.02
Endosulfan I	0.01	0.02
4,4'-DDE	0.02	0.04
Dieldrin	0.02	0.04
Endosulfan Sulfate	0.02	0.04
Endrin Ketone	0.02	0.04
Methoxychlor	0.1	0.2
Tetrachloro-m-xylene	0.02	0.04
Decachlorobiphenyl	0.02	0.04

#### PERFORMANCE EVALUATION

Compounds	Total nanograms (1µL)	Total nanograms (2µL)
gamma-BHC	0.01	0.02
alpha-BHC	0.01	0.02
4,4'-DDT	0.1	.02
beta-BHC	0.01	0.02
Endrin	0.05	0.1

## Southwest Laboratory of Oklahoma

Methoxychlor	0.25	0.5
Tetrachloro-m-xylene	0.02	0.04
Decachlorobiphenyl	0.02	0.04

### INDIVIDUAL STANDARD MIXTURE A -- LOW

Compounds	Total nanograms (1μL)	Total nanograms (2μL)
alpha-BHC	0.005	0.01
Heptachlor	0.005	0.01
gamma-BHC	0.005	0.01
Endosulfan I	0.005	0.01
Dieldrin	0.01	0.02
Endrin	0.01	0.02
4,4'-DDD	0.01	0.02
4,4'-DDT	0.01	0.02
Methoxychlor	0.05	0.1
Tetrachloro-m-xylene	0.005	0.01
Decachlorobiphenyl	0.01	0.02

### INDIVIDUAL STANDARD MIXTURE B -- LOW

Compounds	Total nanograms (1μL)	Total nanograms (2μL)
beta-BHC	0.005	0.01
delta-BHC	0.005	0.01
Aldrin	0.005	0.01
Heptachlor epoxide	0.005	0.01
alpha-Chlordane	0.005	0.01
gamma-Chlordane	0.005	0.01
4,4'-DDE	0.01	0.02
Endosulfan sulfate	0.01	0.02
Endrin aldehyde	0.01	0.02
Endrin ketone	0.01	0.02
Endosulfan II	0.01	0.02
Tetrachloro-m-xylene	0.005	0.01
Decachlorobiphenyl	0.01	0.02

### INDIVIDUAL STANDARD MIXTURE A -- MEDIUM

Compounds	Total nanograms (1μL)	Total nanograms (2μL)
alpha-BHC	0.02	0.04
Heptachlor	0.02	0.04
gamma-BHC	0.02	0.04
Endosulfan I	0.02	0.04
Dieldrin	0.04	0.08
Endrin	0.04	0.08
4,4'-DDD	0.04	0.08

## Southwest Laboratory of Oklahoma

4,4'-DDT	0.04	0.08
Methoxychlor	0.2	0.4
Tetrachloro-m-xylene	0.02	0.04
Decachlorobiphenyl	0.04	0.08

### INDIVIDUAL STANDARD MIXTURE B -- MEDIUM

Compounds	Total nanograms (1 $\mu$ L)	Total nanograms (2 $\mu$ L)
beta-BHC	0.02	0.04
delta-BHC	0.02	0.04
Aldrin	0.02	0.04
Heptachlor epoxide	0.02	0.04
alpha-Chlordane	0.02	0.04
gamma-Chlordane	0.02	0.04
4,4'-DDE	0.04	0.08
Endosulfan sulfate	0.04	0.08
Endrin aldehyde	0.04	0.08
Endrin ketone	0.04	0.08
Endosulfan II	0.04	0.08
Tetrachloro-m-xylene	0.02	0.04
Decachlorobiphenyl	0.04	0.08

### INDIVIDUAL STANDARD MIXTURE A -- HIGH

Compounds	Total nanograms (1 $\mu$ L)	Total nanograms (2 $\mu$ L)
alpha-BHC	0.08	0.16
Heptachlor	0.08	0.16
gamma-BHC	0.08	0.16
Endosulfan I	0.08	0.16
Dieldrin	0.16	0.32
Endrin	0.16	0.32
4,4'-DDD	0.16	0.32
4,4'-DDT	0.16	0.32
Methoxychlor	0.8	1.6
Tetrachloro-m-xylene	0.08	0.16
Decachlorobiphenyl	0.16	0.32

### INDIVIDUAL STANDARD MIXTURE B -- HIGH

Compounds	Total nanograms (1 $\mu$ L)	Total nanograms (2 $\mu$ L)
beta-BHC	0.08	0.16
delta-BHC	0.08	0.16
Aldrin	0.08	0.16
Heptachlor epoxide	0.08	0.16
alpha-Chlordane	0.08	0.16
gamma-Chlordane	0.08	0.16
4,4'-DDE	0.16	0.32

*Southwest Laboratory of Oklahoma*

Endosulfan sulfate	0.16	0.32
Endrin aldehyde	0.16	0.32
Endrin ketone	0.16	0.32
Endosulfan II	0.16	0.32
Tetrachloro-m-xylene	0.08	0.16
Decachlorobiphenyl	0.16	0.32

MULTI-RESPONSE STANDARD MIXTURES

Compounds	Total nanograms (1 $\mu$ L)	Total nanograms (2 $\mu$ L)
Aroclor-1016	0.1	0.2
Aroclor-1221	0.2	0.4
Aroclor-1232	0.1	0.2
Aroclor-1242	0.1	0.2
Aroclor-1248	0.1	0.2
Aroclor-1254	0.1	0.2
Aroclor-1260	0.1	0.2
Toxaphene	0.5	1.0

All manual integrations in this data package for GC/EC have been performed for one of the following reasons:

- Data system missed a peak during processing.
- Data system improperly integrated a peak.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or his designee, as verified by the following signature.



Brett R Dees  
GC Laboratory Supervisor  
June 20, 1996

2A  
WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: SWL-TULSA Contract: 68-D5-0021  
Lab Code: SWOK Case No.: 24752 SAS No.: SDG No.: EZD19

	EPA SAMPLE NO.	SMC1 (TOL) #	SMC2 (BFB) #	SMC3 (DCE) #	OTHER	TOT OUT
01	VBLK1	98	91	98		0
02	EZD19	100	94	98		0
03	EZD21	98	96	100		0
04	EZD20	98	96	98		0
05	EZD20MS	97	96	96		0
06	EZD20MSD	97	100	96		0
07	VBLK2	97	96	96		0
08	EZD22	108	97	97		0
09	VBLK3	93	94	94		0
10	VHBLK1	90	86	88		0
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SMC1 (TOL) = Toluene-d8 (88-110)  
SMC2 (BFB) = Bromofluorobenzene (86-115)  
SMC3 (DCE) = 1,2-Dichloroethane-d4 (76-114)

# Column to be used to flag recovery values

\* Values outside of contract required QC limits

3A  
WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SWL-TULSA

Contract: 68-D5-0021

Lab Code: SWOK

Case No.: 24752

SAS No.:

SDG No.: EZD19

Matrix Spike - EPA Sample No.: EZD20

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
1,1-Dichloroethene	50	0	53	106	61-145
Trichloroethene	50	0	50	100	71-120
Benzene	50	0	56	112	76-127
Toluene	50	0	50	100	76-125
Chlorobenzene	50	0	49	98	75-130

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	REC.
1,1-Dichloroethene	50	55	110	4	14	61-145
Trichloroethene	50	50	100	0	14	71-120
Benzene	50	56	112	0	11	76-127
Toluene	50	51	102	2	13	76-125
Chlorobenzene	50	51	102	4	13	75-130

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

RPD: 0 out of 5 outside limits

Spike Recovery: 0 out of 10 outside limits

COMMENTS:

4A  
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

Lab Name: SWL-TULSA

Contract: 68-D5-0021

VBLK1

Lab Code: SWOK

Case No.: 24752

SAS No.:

SDG No.: EZD19

Lab File ID: L21153.D

Lab Sample ID: L960621A

Date Analyzed: 06/21/96

Time Analyzed: 0935

GC Column: DB-624

ID: 0.53 (mm)

Heated Purge: (Y/N) N

Instrument ID: L

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	EZD19	25973.19	L21156.D	1104
02	EZD21	25973.21	L21157.D	1133
03	EZD20	25973.20	L21160.D	1304
04	EZD20MS	25973.20MS	L21161.D	1346
05	EZD20MSD	25973.20MSD	L21162.D	1420
06				
07				
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COMMENTS:



4A  
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

Lab Name: SWL-TULSA

Contract: 68-D5-0021

VBK2

Lab Code: SWOK

Case No.: 24752

SAS No.:

SDG No.: EZD19

Lab File ID: L21170.D

Lab Sample ID: L960621B

Date Analyzed: 06/21/96

Time Analyzed: 1945

GC Column: DB-624

ID: 0.53 (mm)

Heated Purge: (Y/N) N

Instrument ID: L

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	EZD22	25973.22	L21176.D	2352
02				
03				
04				
05				
06				
07				
08				
09				
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COMMENTS: